

REMARKS

This Amendment is in response to the Final Office Action dated **April 19, 2005**, wherein the amendment to the specification filed January 25, 2005 was objected to under 35 U.S.C. §132(a); claim 33 was rejected under 35 U.S.C. §112, first paragraph; claims 33-37 and 39-41 were rejected under 35 U.S.C. §103(a) as being obvious over U.S. 5,807,520 to Wang et al (Wang) in view of U.S. 5,525,388 to Wand et al (Wand); and claims 33 and 38 were rejected under 35 U.S.C. §103(a) as being obvious over Wang.

The following comments are presented in the same order and with paragraph headings corresponding to the Final Office Action (Applicants note however that the §112 rejection was presented under the heading referring to §101. The corresponding heading below refers to §112).

Specification

In the Final Office Action the amendment to the specification filed January 25, 2005 was objected to under §132(a). More specifically, it was asserted that the original specification does not disclose a mandrel 200 disposed inside segment 120 as shown and described by the amendment. Applicants respectfully disagree.

The concept of a mandrel and its use in machining and processing tubular members is well understood. One of ordinary skill in the art will recognize that a mandrel is a spindle or an axle used to secure or support material being machined or milled. The specification as originally filed clearly provides for the use of a mandrel in addition to or as a substitution for the die 162 (see page 9, lines 11-12). Given the tubular nature of the segment 120 and the recognized use and application of a mandrel in supporting such a tubular segment, one of ordinary skill in the art will inherently recognize that in order for the mandrel to support the segment in the manner described, the mandrel must be positioned within the segment 120. The amendment to the specification and drawings of January 25, 2005 are not new matter, but rather further describe and depict the recognized use of a mandrel to support a tubular segment, which was set forth in Application as originally filed.

In support of the above, Applicants submit herewith the Declaration in support of patentability under §1.132 of David Parsons. Mr. Parsons is one of at least ordinary skill in the art of processing tubular segments and balloons.

Claim Rejections – 35 U.S.C. §112

In the Final Office Action claim 33 was rejected under §112, first paragraph. More specifically, the official action asserted that the specification and drawings fail to disclose rotating a mandrel so as to rotate the balloon.

In response, Applicants note that the specification describes a grinding method wherein the tubing segment 120 is rotated relative to the die during the grinding process (page 9, lines 13-19). As indicated above, the use of a mandrel to support the segment 120 is fully supported by the Application as originally filed (see page 9, lines 11-12). When the mandrel is supporting the tubular segment in the well recognized manner described above, it is inherent that when mandrel will be rotated to allow the segment 120 to be rotated as described. Given that the specification clearly provides for the mandrel to **support** the segment 120, it is inherent that the mandrel provide the rotation to the segment 120 as opposed to being static relative thereto.

The relationship described between the mandrel and segment 120 will be recognized by one of ordinary skill in the art and is set fourth in the aforementioned Declaration in support of patentability under §1.132

In light of the above, the rejection is respectfully traversed.

Claim Rejections – 35 U.S.C. §103

Wang in view of Wand

In the Final Office Action claims 33-37 and 39-41 were rejected under §103(a) as being obvious over Wang in view of Wand. More specifically, the Final Office Action asserts that while Wang does not teach reducing balloon waist thickness and balloon cone/tapered portion thickness by abrading, it would have been obvious to thin a balloon by abrading as described in Wand.

In the previous Response, Applicants addressed this rejection by noting that in

contrast to the instant claims both Wang and Wand seek to provide balloons with *uniform* or *constant* wall thickness (Wang: column 2, lines 25-33; Wand: column 2, lines 46-47). Nowhere do the references, alone or in combination, teach or suggest a method of removing material from a balloon wherein removal of said material is to form “a shaft section having a first portion with a substantially uniform first diameter and a second portion with a substantially uniform second diameter, different than the first diameter” as the instant claims recite.

In the Final Office Action, rather than disputing the Applicants’ assertion as to the failure of Wand and Wang to teach or suggest all of the elements of the instant claims, the Examiner instead addresses this point by stating that “[I]nherently, the uniformed thickness of the waist portions are somewhat different from one another because of manufacturing tolerance.”

While it is certainly recognized that manufacturing tolerance may come into play in the processing of a balloon or tubular parison, it is nevertheless appears axiomatic that neither Wang nor Wand, alone or in combination, teach or suggest all of the elements of the instant claims. The instant claims are directed, in relevant part, to a method wherein material is removed from a portion of at least one of the proximal shaft section and the distal shaft section of a balloon, to form a shaft section having a first portion with a substantially uniform first diameter and a second portion with a substantially uniform second diameter, which is different than the first diameter. This difference in diameter is not an aspect of manufacturing tolerance, but an inventive step that cited references fail to teach or suggest. As a result, the rejection is respectfully traversed.

Wang

In the Final Office Action claims 33 and 38 were rejected under 35 U.S.C. §103(a) as being obvious over Wang alone.

Initially, Applicants note that it is a well understood tenant of U.S. patent law that a case of §103 obviousness cannot be established by combining the teachings of the prior art to produce the claimed invention, absent some teaching or suggestion supporting the combination." (*In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) citing: *ACS Hosp. Sys.*, 732 F.2d at 1577, 221 USPQ at 933.

In the Final Office Action no motivation is provide to support the finding of obviousness. Rather it is merely stated that though Wang does not teach reducing wall thickness by chemical etching/solvent, it would have been obvious to one of ordinary skill in the art to use chemical etching/solvent to thin a balloon material in a process as recited in the claims.

There is nothing in Wang which would provide the requisite suggestion or motivation to seek to use chemical etching or solvent to reduce the thickness of a balloon as recited in the instant claims.

It is only when Wang is viewed through the lens of hindsight afforded by the present Application that any suggestion to use chemical etching/solvent to reduce the thickness of the balloon made apparent. The use of such hindsight in attempting to establish §103 obviousness is impermissible.

In light of the above the rejection is respectfully traversed.

Conclusion

In light of the above comments, claims 33-41 are believed to be in condition for allowance. Notification to that effect is respectfully requested.

Respectfully submitted,

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